	Application No.	Applicant(s)
Notice of Allowability	09/942,782	KAGEYAMA ET AL.
	Examiner	Art Unit	
	Anh Ly	2162	

*-- The **MAILING DATE** of this communication appears on the cover sheet with the correspondence address--*

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *06/15/2005 & interviewed with Jean Corr. on 02/01/2006*.

2. ☒ The allowed claim(s) is/are *1, 3-7, 8, 9, 11-15, 16, 17,19-23, 24, 25, 26, 27, & 28 (renumbered as 1-25)*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .
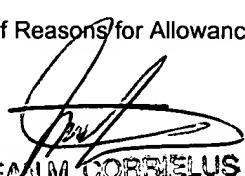
JEAN M. CORNELUS
PRIMARY EXAMINER

DETAILED ACTION

1.   This Office Action is response to Applicants' AMENDMENT filed on 06/15/2005.

EXAMINER'S AMENDMENT

2.   An examiner's amendment to the record appears below. Should the changes

and/or additions be unacceptable to applicant, an amendment may be filed as provided

by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be

submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview

with Mr. Carl Brundidge (Reg. No.: 29,621) on THU. 02/02/2006 @ 2:09 PM. (703-684-

1120).

The application has been amended as follows:

Claim 1:

1. (Currently Amended): A file management method having a first processing

mode wherein upon occurrence of a write error for a file data to be written on a

recording medium, replacement processing to write the data in another write area is

carried out, and having a second processing mode wherein upon occurrence of a write

error for a file data to be written on the recording medium, the replacement processing

to write the data in another write area is not carried out, said recording medium storing

file type information, said method includes the steps of:

reading a file type information associated with a file to be processed from the

recording medium, the file type information being used for identifying a processing

mode between said first processing mode and said second processing mode as file

management information associated with said file;

converting said file type information indicative of said first processing mode to a

file type information indicative of said second processing mode;

writing the converted file type information in the recording medium as the file

management information associated with said file to be processed; **and**

wherein said replacement processing is carried out on an ECC block basis,

said block including N recording units termed as sectors, wherein N is a positive

integer, and further comprising steps of:

judging whether or not in all the N sectors of said ECC blocks that store

data belonging to the file, are occupied; and

when judging that the data is not stored in the all N sectors of the ECC

blocks, registering in said file management information remaining sector in which

the data of the file to be processed is not stored as a stuffing.

Cancelled claim 2

Claim 3:

The first line of claim 3, "(previously presented) A file management method as set

forth in claim 2", rewrite it as **"(currently amended) A file management method as**

set forth in claim 1"

Claim 4:

The first line of claim 4, "(previously presented) A file management method as set forth in claim 2", rewrite it as ""**(currently amended) A file management method as set forth in claim 1**"

Claim 7:

7. (**Currently amended**) A file management method according to claim 1 comprising the steps of:

reading data stored at another write area by said replacement processing; and

writing said data in an original recording area where the data would have been written without said replacement processing wherein said replacement processing and the reading step and writing step are carried out on a basis of an ECC block including N recording units termed as sectors, **wherein N is a positive integer**.

Claim 8:

8. (Currently Amended): A file management method having a first processing mode wherein upon occurrence of a write error for a file data to be written on a recording medium, replacement processing to write the data in another write area is carried out, and having a second processing mode wherein upon occurrence of a write error for a file data to be written on the recording medium, the replacement processing to write the data in another write area is not carried out, said recording medium storing file type information, said method includes the steps of:

judging without using said file type information whether or not said file to be

processed is read in said second processing mode, the file type information being used

for identifying a processing mode between said first processing mode and said second

processing mode in said recording medium as file management information associated

with said file;

when judging by said judgment step that said file to be processed is read,

reading the data in said second processing mode;

when judging by said judgment step that said file to be processed is read,

reading the data in said second processing mode;

when judging by said judgment step that said file to be processed is not read,

reading the data in said first processing mode; **and**

wherein said replacement processing is carried out on an ECC block basis,

said block including N recording units termed as sectors, wherein N is a positive

integer, and further comprising steps of:

judging whether or not in all the N sectors of said ECC blocks that store

data belonging to the file, are occupied; and

when judging that the data is not stored in the all N sectors of the ECC

blocks, registering in said file management information remaining sector in which

the data of the file to be processed is not stored as a stuffing.

Claim 9:

9. (Currently Amended): A file management apparatus having a first processing mode wherein upon occurrence of a write error for a file data to be written on a recording medium, replacement processing to write the data in another write area is carried out, and having a second processing mode wherein upon occurrence of a write error for a file data to be written on the recording medium, the replacement processing to write the data in another write area is not carried out, said recording medium storing file type information, said apparatus comprising:

means for reading a file type information associated with a file to be processed from the recording medium, the file type information being used for identifying a processing mode between said first processing mode and said second processing mode as file management information associated with said file;

means for converting said file type from the file type indicative of said first processing mode to a file type indicative of said second processing mode;

means for writing the file type after conversion in the recording medium as file management information associated with said file to be processed; **and**

wherein said replacement processing is carried out on an ECC block basis, said block as a recording unit including N sectors, wherein N is a positive integer, and further comprising:

means for judging whether or not in all the N sectors of said ECC blocks that store data belonging to the file, are occupied; and

when said judging means judges that the data is not stored in the all N

sectors of the ECC blocks, means for registering one of the remaining sectors in

the ECC block in which the data of the file to be processed is not stored as

stuffing in said file management information.

Cancelled claim 10

Claim 11:

The first two lines of claim 11, "(previously presented) A file management

apparatus as set forth in claim 10", rewrite it as **"(currently amended) A file**

management apparatus as set forth in claim 9"

Claim 12:

The first two lines of claim 12, "(previously presented) A file management

apparatus as set forth in claim 10", rewrite it as **"(currently amended) A file**

management apparatus as set forth in claim 9"

Claim 15:

15. **(currently amended)** A file management apparatus according to claim 9

comprising:

means for reading data stored at another write area by said replacement

processing; and

means for writing said data in an original recording area where the data would have been written without said replacement processing, wherein said replacement processing and the reading and the writing are carried out on a basis of an ECC block including N recording units termed as sectors, **wherein N is a positive integer.**

Claim 16:

16. (Currently Amended): A file management apparatus having a first processing mode wherein upon occurrence of a write error for a file data to be written on a recording medium, replacement processing to write the data in another write area is carried out, and having a second processing mode wherein upon occurrence of a write error for a file data to be written on the recording medium, the replacement processing to write the data in another write area is not carried out, said recording medium storing file type information, said apparatus comprising:

means for judging without using said file type information whether or not said file to be processed is read in said second processing mode, the file type information being used for identifying a processing mode between said first processing mode and said second processing mode in said recording medium as file management information associated with said file;

when said judging means judges that said file to be processed is read, means for reading the data in said second processing mode;

when said judging means judges that said file to be processed is not read, means for reading the data in said first processing mode; **and**

wherein said replacement processing is carried out on an ECC block basis, said block as a recording unit including N sectors, wherein N is a positive integer, and further comprising:

means for judging whether or not in all the N sectors of said ECC blocks that store data belonging to the file, are occupied; and

when said judging means judges that the data is not stored in the all N sectors of the ECC blocks, means for registering one of the remaining sectors in the ECC block in which the data of the file to be processed is not stored as stuffing in said file management information.

Claim 17:

17. (currently amended) A program having a first processing mode wherein upon occurrence of a write error for a file data to be written on a recording medium, replacement processing to write the data in another write area is carried out, and having a second processing mode wherein upon occurrence of a write error for a file data to be written on the recording medium, replacement processing to write the data in another write area is not carried out, said recording medium storing file type information, said program for causing a computer to execute the steps:

reading a file type information associated with a file to be processed from the recording medium, the file type information being used for identifying a processing mode between said first processing mode and said second processing mode as file management information associated with said file;

converting said file type information indicative of said first processing mode to a

file type information indicative of said second processing mode;

writing the converted file type information in the recording medium as the file

management information associated with said file to be processed; **and**

wherein said replacement processing is carried out on an ECC block basis,

said block as a recording unit including N, wherein N is a positive integer sectors,

said program for causing a computer to execute the steps of:

judging whether or not all the N sectors of said ECC blocks that store data

belonging to the file, are occupied; and

when said judging step judges that the data is not stored in the all N

sectors of the ECC blocks, registering one of the remaining sectors in which the

data of the file to be processed is not stored as a stuffing in said file management

information.

Cancelled claim 18

Claim 19:

The first line of claim 19, "(previously presented) A program as set forth in claim

18", rewrite it as **"(currently amended) A program as set forth in claim 17"**

Claim 20:

The first line of claim 20, "(original) A program as set forth in claim 18 for causing

a computer to", rewrite it as **"(currently amended) A program as set forth in claim 17**

for causing a computer to"

Claim 23:

23. **(currently amended)** A program according to claim 17 said program for

causing a computer to execute the steps of:

reading data stored at another write area by said replacement processing; and

writing said data in an original recording area where the data would have been

written without said replacement processing wherein said replacement processing and

the reading step and the writing step are carried out on a basis of an ECC block

including N recording units termed as sectors, **wherein N is a positive integer**.

Claim 24:

24. (currently amended) A program having a first processing mode wherein,

when data in the form of a file is written on a recording medium and a write error occurs,

replacement processing to write the data in another write area is carried out, and having

a second processing mode wherein, when the write error occurs, the replacement

processing to write the data in the other write area is not carried out, for storing a file

type, said program for causing a computer to execute the steps of:

judging without using said file type whether or not said file to be processed is

read in said second processing mode, the file type being used for identifying a

processing mode between said first processing mode and said second processing

mode in said recording medium as file management information associated with said

file;

when said judging step judges that said file to be processed is read, reading the

data in said second processing mode;

when said judging step judges that said file to be processed is not read, reading

the data in said first processing mode; **and**

wherein said replacement processing is carried out on an ECC block basis,

said block as a recording unit including N, wherein N is a positive integer sectors,

said program for causing a computer to execute the steps of:

judging whether or not all the N sectors of said ECC blocks that store data

belonging to the file, are occupied; and

when said judging step judges that the data is not stored in the all N

sectors of the ECC blocks, registering one of the remaining sectors in which the

data of the file to be processed is not stored as a stuffing in said file management

information.

Claim 25:

25. (currently amended) A file management method having a first processing

mode wherein upon occurrence of a write error for a file data to be written on a

recording medium, replacement processing to write the data in another write area is

carried out, and having a second processing mode wherein upon occurrence of a write

error for a file data to be written on the recording medium, the replacement processing

to write the data in another write area is not carried out, said recording medium storing

file type information, said method comprising the steps of:

regarding the file type information of a file to be processed as said second

processing mode regardless of said file type information and reading the data in said

second processing mode, the file type information being used for identifying a

processing mode between said first processing mode and said second progressing

mode in said recording medium as file management information associated with said

file; **and**

wherein said replacement processing is carried out on an ECC block basis,

said block including N recording units termed as sectors, wherein N is a positive

integer, and further comprising steps of:

judging whether or not in all the N sectors of said ECC blocks that store

data belonging to the file, are occupied; and

when judging that the data is not stored in the all N sectors of the ECC

blocks, registering in said file management information remaining sector in which

the data of the file to be processed is not stored as a stuffing.

Claim 26 :

26. (currently amended) A file management apparatus having a first processing mode wherein upon occurrence of a write error for a file to be written on a recording medium, replacement processing to write the data in another write area is carried out, and having a second processing mode wherein upon occurrence of a write error for a file data to be written on the recording medium, the replacement processing to write the data in another write area is not carried out, said recording medium storing file type information, said apparatus comprising:

means for regarding the file type information of a file to be processed as said second processing mode regardless of said file type information and reading the data in said second processing mode. the file type information being used for identifying a processing mode between said first processing mode and said second processing mode in said recording medium as file management information associated with said file; **and**

wherein said replacement processing is carried out on an ECC block basis, said block as a recording unit including N sectors, wherein N is a positive integer, and further comprising:

means for judging whether or not in all the N sectors of said ECC blocks that store data belonging to the file, are occupied; and

when said judging means judges that the data is not stored in the all N sectors of the ECC blocks, means for registering one of the remaining sectors in

the ECC block in which the data of the file to be processed is not stored as stuffing in said file management information.

Claim 27:

27. (currently amended) A program having a first processing mode wherein upon occurrence of a write error for a file data to be written on a recording medium, replacement processing to write the data in another write area is carried out, and having a second processing mode wherein upon occurrence of a write error for a file data to be written on the recording medium, the replacement processing to write the data in another write area is not carried out, said recording medium storing file type information said program for causing a computer to execute the step of:

regarding the file type information of a file to be processed as said second processing mode regardless of said file type information and reading the data in said second processing mode, the file type information being used for identifying a processing mode between said first processing mode and said second processing mode in said recording medium as file management information associated with said file; **and**

wherein said replacement processing is carried out on an ECC block basis, said block as a recording unit including N, wherein N is a positive integer sectors, said program for causing a computer to execute the steps of:

judging whether or not all the N sectors of said ECC blocks that store data belonging to the file, are occupied; and

when said judging step judges that the data is not stored in the all N

sectors of the ECC blocks, registering one of the remaining sectors in which the

data of the file to be processed is not stored as a stuffing in said file management

information.

Claim 28:

28. (**Currently amended**) A file management method for managing data stored

in a recording medium in a file form, the method comprising the steps of:

recording information on a file type of the data in the recording medium, the file

type in the data being both of a first file type associated with a first processing mode in

which a data reading operation stops in response to an error in the data and a second

file type associated with a second processing mode in which a data reading operation is

kept continued regardless of an error in the data;

reading the information on the file type of the data to be processed from the

recording medium, the file type information being used for identifying a processing

mode between said first processing mode and said second processing mode;

converting the first file type of the data read from the recording medium to the

second file type in response to existence of a part of the first file type;

writing the converted second file type into the recording medium;

reading out the data, a file type of which is the second file type, from the

recording medium; **and**

replacing a part of the data in the first file type in the recording medium on an

ECC blocks basis in case that the reading operation stops, the block including N-

recording units termed as sectors, **wherein N is a positive integer**;

judging whether or not all the N sectors of the ECC blocks are occupied; and

registering, in the information on the file type recorded in the recording medium,

a remaining sector as a stuffing when the all the N sectors of the ECC blocks are

occupied.

Cancelled claim 29

3.　　　Claims 2, 10, 18 and 29 have been cancelled.

4.　　　Claims 1, 3-7, 8, 9, 11-15, 16, 17, 19-23, 24, 25, 26, 27 & 28 are allowed.

Allowable Subject Matter

5.　　　The present application has been thoroughly reviewed. Upon searching a variety

of databases, the examiner respectfully submits that claims 1, 3-7, 8, 9, 11-15, 16, 17,

19-23, 24, 25, 26, 27 & 28 are allowed in light of the applicants' argument and in light of

the prior arts of made record.

6.　　　The following is an examiner's statement of reasons for allowance:

The claimed invention is directed to a method, an apparatus and a program for

having first and second processing modes for storing file type information for

discrimination between first and second progressing modes in recording medium. In the

first processing mode, when data in form of file is written on a recording medium and a

write error occurs, replacement processing to another write area is performed to write

the data in another area. In the second processing mode, when write error occurs, the

replacement processing to other write are is not performed to write the data. The

invention also directed to reading file type information associated with a file to be

processed from recording medium.

The closest prior arts, Kimura et al. (hereinafter Kimura) of US Patent No.:

6,665,690 teaches recording and reproducing different types of data including AV and

PC data on a disc type medium. The type of the recorded data determines the length of

recording medium units used to record the data on the disc.

Kimura fails to teach "the file type information being used for identifying a

processing mode between said first processing mode and said second processing

mode as file management information associated with said file."

7.   These distinct features, in conjunction with all other limitations of the dependents

and independent claims render claims 1, 3-7, 8, 9, 11-15, 16, 17, 19-23, 24, 25, 26, 27

& 28 them allowable.

8.   Any comments considered necessary by applicant must be submitted no later

than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on

Statement of Reasons for Allowance."

Contact Information

9.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh Ly whose telephone number is (571) 272-4039 or via E-Mail: ANH.LY@USPTO.GOV **or fax to (571) 273-4039 (Examiner's fax number)**. The examiner can normally be reached on TUESDAY – THURSDAY from 8:30 AM – 3:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene, can be reached on (571) 272-4107 or **Primary Examiner Jean Corrielus (571) 272-4032.**

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see **http://pair-direct.uspto.gov**. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). Any response to this action should be mailed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231, or faxed to: **Central Fax Center: (571) 273-8300**

JEAN M. CORRIELUS
PRIMARY EXAMINER

ANH LY
FEB. 2nd, 2006